

P12389.sequence engl.txt  
SEQUENCE LISTING

<110> Fiedler, Dr. Ulrike  
Rudolph, Prof. Dr. Rainer

<120> Design of beta-sheet proteins with specific  
binding properties

<130> P12389

<140>  
<141>

<150> DE 199 32 688.6  
<151> 1999-07-13

<160> 22

<170> PatentIn Ver. 2.1

<210> 1  
<211> 45  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial  
Sequence: oligonucleotide

<400> 1  
cgcgcgcgtc tcacaaagat acatgccatg actcgcggcc cagcc 45

<210> 2  
<211> 50  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial  
Sequence: oligonucleotide

<400> 2  
gccgcaggaa gtactggtga ccctggtagt tggggcgctc atacagcatc 50

<210> 3  
<211> 41  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial  
Sequence: oligonucleotide

<400> 3  
ccatcagccc catcagcgaa ctttgccgca ggaagtactg g 41

<210> 4  
<211> 48  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial

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Sequence: oligonucleotide

<400> 4  
 gagtcattct gcggccgcat aaaaatccat caccctctt aaagaacc 48

<210> 5  
 <211> 59  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> Description of Artificial  
 Sequence: oligonucleotide

<400> 5  
 gcggcccagc cggccgctgc tggatgctgt atgagcgccc caactaccag ggtcaccag 59

<210> 6  
 <211> 55  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> Description of Artificial  
 Sequence: oligonucleotide

<400> 6  
 catgccatga ctgcggtccc agccggccat ggggaagatc actttttacg aggac 55

<210> 7  
 <211> 26  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> Description of Artificial  
 Sequence: oligonucleotide

<400> 7  
 ccatgattac gccaaagcttt ggagcc 26

<210> 8  
 <211> 21  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> Description of Artificial  
 Sequence: oligonucleotide

<400> 8  
 ctgaaagtgc cggtgtgttg c 21

<210> 9  
 <211> 176  
 <212> DNA  
 <213> Bos sp.

<400> 9  
 ggcccagccg gccatgggga ggatcaagtt taaagaggac cggggcttcc agggccacta 60  
 ttacagttgc aatagcgact gccccaacct gcagccctat ttcagccgct gtaactccat 120  
 cagggtgctg agcggctgct ggatgctgta tgagcgcccc aactaccagg gtcacc 176

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<210> 10  
 <211> 176  
 <212> DNA  
 <213> Bos sp.

<400> 10  
 ggcccagccg gccatgggga agatcacttt ttacgaggac cggggcttcc agggccactg 60  
 ctacgagtgc agcagcgact gcccacacct gcagccctat ttcagccgct gtaactccat 120  
 ccgctgggac agcggctgct ggatgctgta tgagcgcccc aactaccagg gccacc 176

<210> 11  
 <211> 54  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial  
 Sequence: oligonucleotide

<400> 11  
 ccccatggcc ggctgggccc cgagtcattg catgtatctt tgtgagacgc gcgcg 54

<210> 12  
 <211> 36  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial  
 Sequence: oligonucleotide

<400> 12  
 ggccatgggg nnkacnnkt ttnkgagga ccgggg 36

<210> 13  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial  
 Sequence: oligonucleotide

<400> 13  
 gtggccctgg aagccccggg cctc 24

<210> 14  
 <211> 44  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial  
 Sequence: oligonucleotide

<400> 14  
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<210> 15  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence

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&lt;220&gt;

<223> Description of Artificial  
Sequence: oligonucleotide

&lt;400&gt; 15

tgcagcccta tttcagccgc

20

&lt;210&gt; 16

&lt;211&gt; 47

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial  
Sequence: oligonucleotide

&lt;400&gt; 16

gatggagtta cagcggctga aatagggctg caggttgggg cagtcgc

47

&lt;210&gt; 17

&lt;211&gt; 45

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial  
Sequence: oligonucleotide

&lt;400&gt; 17

tgtaactcca tcnnkgtgnn kagcggctgc tggatgctgt atgag

45

&lt;210&gt; 18

&lt;211&gt; 37

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial  
Sequence: oligonucleotide

&lt;400&gt; 18

cgccccaaact accaggggtca ccagtacttc ctgcggc

37

&lt;210&gt; 19

&lt;211&gt; 198

&lt;212&gt; PRT

&lt;213&gt; Bos sp.

&lt;400&gt; 19

Ala Ala Gln Pro Ala Met Gly Arg Ile Lys Phe Lys Glu Asp Arg Gly  
1 5 10 15Phe Gln Gly His Tyr Tyr Ser Cys Asn Ser Asp Cys Pro Asn Leu Gln  
20 25 30Pro Tyr Phe Ser Arg Cys Asn Ser Ile Arg Val Leu Ser Gly Cys Trp  
35 40 45Met Leu Tyr Glu Arg Pro Asn Tyr Gln Gly His Gln Tyr Phe Leu Arg  
50 55 60Arg Gly Asp Tyr Pro Asp Tyr Gln Gln Trp Met Gly Phe Asn Asp Ser  
65 70 75 80

## P12389.sequence engl.txt

Ile Arg Ser Cys Arg<sub>85</sub> Leu Ile Pro Gln His<sub>90</sub> Thr Gly Thr Phe Arg<sub>95</sub> Met  
 Arg Ile Tyr Glu<sub>100</sub> Arg Asp Asp Phe Arg<sub>105</sub> Gly Gln Met Ser Glu<sub>110</sub> Ile Thr  
 Asp Asp Cys<sub>115</sub> Pro Ser Leu Gln Asp<sub>120</sub> Arg Phe His Leu Thr<sub>125</sub> Glu Val His  
 Ser Leu<sub>130</sub> Asn Val Leu Glu Gly<sub>135</sub> Ser Trp Val Leu Tyr<sub>140</sub> Glu Met Pro Ser  
 Tyr Arg Gly Arg Gln Tyr<sub>150</sub> Leu Leu Arg Pro Gly<sub>155</sub> Glu Tyr Arg Arg Tyr<sub>160</sub>  
 Leu Asp Trp Gly Ala<sub>165</sub> Met Asn Ala Lys Val<sub>170</sub> Gly Ser Leu Arg Arg<sub>175</sub> Val  
 Met Asp Phe Tyr<sub>180</sub> Ala Ala Ala Gly Ala<sub>185</sub> Pro Val Pro Tyr Pro Asp Pro  
 Leu Glu Pro Arg Ala Ala  
 195

<210> 20  
 <211> 198  
 <212> PRT  
 <213> Bos sp.

<400> 20  
 Ala Ala Gln Pro Ala<sub>5</sub> Met Gly Lys Ile Thr<sub>10</sub> Phe Tyr Glu Asp Arg<sub>15</sub> Gly  
 1  
 Phe Gln Gly His<sub>20</sub> Cys Tyr Glu Cys Ser<sub>25</sub> Ser Asp Cys Pro Asn Leu Gln  
 30  
 Pro Tyr Phe<sub>35</sub> Ser Arg Cys Asn Ser<sub>40</sub> Ile Arg Val Asp Ser<sub>45</sub> Gly Cys Trp  
 Met Leu<sub>50</sub> Tyr Glu Arg Pro Asn<sub>55</sub> Tyr Gln Gly His Gln<sub>60</sub> Tyr Phe Leu Arg  
 Arg Gly Asp Tyr Pro Asp<sub>70</sub> Tyr Gln Gln Trp Met<sub>75</sub> Gly Phe Asn Asp Ser<sub>80</sub>  
 65  
 Ile Arg Ser Cys Arg<sub>85</sub> Leu Ile Pro Gln His<sub>90</sub> Thr Gly Thr Phe Arg<sub>95</sub> Met  
 Arg Ile Tyr Glu<sub>100</sub> Arg Asp Asp Phe Arg<sub>105</sub> Gly Gln Met Ser Glu<sub>110</sub> Ile Thr  
 Asp Asp Cys<sub>115</sub> Pro Ser Leu Gln Asp<sub>120</sub> Arg Phe His Leu Thr<sub>125</sub> Glu Val His  
 Ser Leu<sub>130</sub> Asn Val Leu Glu Gly<sub>135</sub> Ser Trp Val Leu Tyr<sub>140</sub> Glu Met Pro Ser  
 Tyr Arg Gly Arg Gln Tyr<sub>150</sub> Leu Leu Arg Pro Gly<sub>155</sub> Glu Tyr Arg Arg Tyr<sub>160</sub>  
 145  
 Leu Asp Trp Gly Ala Met Asn Ala Lys Val Gly Ser Leu Arg Arg Val  
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165

170

175

Met Asp Phe Tyr Ala Ala Ala Gly Ala Pro Val Pro Tyr Pro Asp Pro  
 180 185 190

Leu Glu Pro Arg Ala Ala  
 195

&lt;210&gt; 21

&lt;211&gt; 197

&lt;212&gt; PRT

&lt;213&gt; Bos sp.

&lt;400&gt; 21

Met Gly Arg Ile Lys Phe Lys Glu Asp Arg Gly Phe Gln Gly His Tyr  
 1 5 10 15

Tyr Ser Cys Asn Ser Asp Cys Pro Asn Leu Gln Pro Tyr Phe Ser Arg  
 20 25 30

Cys Asn Ser Ile Arg Val Leu Ser Gly Cys Trp Met Leu Tyr Glu Arg  
 35 40 45

Pro Asn Tyr Gln Gly His Gln Tyr Phe Leu Arg Arg Gly Asp Tyr Pro  
 50 55 60

Asp Tyr Gln Gln Trp Met Gly Phe Asn Asp Ser Ile Arg Ser Cys Arg  
 65 70 75 80

Leu Ile Pro Gln His Thr Gly Thr Phe Arg Met Arg Ile Tyr Glu Arg  
 85 90 95

Asp Asp Phe Arg Gly Gln Met Ser Glu Ile Thr Asp Asp Cys Pro Ser  
 100 105 110

Leu Gln Asp Arg Phe His Leu Thr Glu Val His Ser Leu Asn Val Leu  
 115 120 125

Glu Gly Ser Trp Val Leu Tyr Glu Met Pro Ser Tyr Arg Gly Arg Gln  
 130 135 140

Tyr Leu Leu Arg Pro Gly Glu Tyr Arg Arg Tyr Leu Asp Trp Gly Ala  
 145 150 155 160

Met Asn Ala Lys Val Gly Ser Leu Arg Arg Val Met Asp Phe Tyr Ser  
 165 170 175

Asp Pro Asn Ser Ser Ser Val Asp Lys Leu Ala Ala Ala Leu Glu His  
 180 185 190

His His His His His  
 195

&lt;210&gt; 22

&lt;211&gt; 197

&lt;212&gt; PRT

&lt;213&gt; Bos sp.

&lt;400&gt; 22

Met Gly Lys Ile Thr Phe Tyr Glu Asp Arg Gly Phe Gln Gly His Cys  
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1	5	10	15												
Tyr	Glu	Cys	Ser	Ser	Asp	Cys	Pro	Asn	Leu	Gln	Pro	Tyr	Phe	Ser	Arg
		20						25					30		
Cys	Asn	Ser	Ile	Arg	Val	Asp	Ser	Gly	Cys	Trp	Met	Leu	Tyr	Glu	Arg
		35					40					45			
Pro	Asn	Tyr	Gln	Gly	His	Gln	Tyr	Phe	Leu	Arg	Arg	Gly	Asp	Tyr	Pro
		50				55					60				
Asp	Tyr	Gln	Gln	Trp	Met	Gly	Phe	Asn	Asp	Ser	Ile	Arg	Ser	Cys	Arg
		65			70					75					80
Leu	Ile	Pro	Gln	His	Thr	Gly	Thr	Phe	Arg	Met	Arg	Ile	Tyr	Glu	Arg
				85					90					95	
Asp	Asp	Phe	Arg	Gly	Gln	Met	Ser	Glu	Ile	Thr	Asp	Asp	Cys	Pro	Ser
			100					105					110		
Leu	Gln	Asp	Arg	Phe	His	Leu	Thr	Glu	Val	His	Ser	Leu	Asn	Val	Leu
		115					120						125		
Glu	Gly	Ser	Trp	Val	Leu	Tyr	Glu	Met	Pro	Ser	Tyr	Arg	Gly	Arg	Gln
		130				135					140				
Tyr	Leu	Leu	Arg	Pro	Gly	Glu	Tyr	Arg	Arg	Tyr	Leu	Asp	Trp	Gly	Ala
					150					155					160
Met	Asn	Ala	Lys	Val	Gly	Ser	Leu	Arg	Arg	Val	Met	Asp	Phe	Tyr	Ser
				165					170					175	
Asp	Pro	Asn	Ser	Ser	Ser	Val	Asp	Lys	Leu	Ala	Ala	Ala	Leu	Glu	His
			180					185						190	
His	His	His	His	His											
			195												

P12389.sequence engl.txt



P12389.sequence eng1.txt